

Qualitative observation: When you observe something using all 5 senses. There is no concern for amount or numbers.



Quantitative observation: When you observe the amount of items you are observing.



Inferring: To arrive to a conclusion by reasoning and evidence.



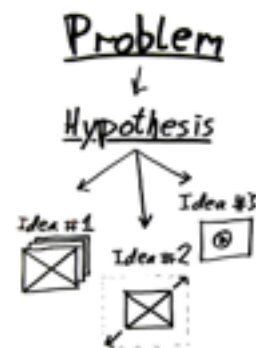
Predicting: To say what you think will happen based on prior knowledge.



Classifying: a way of grouping things that are similar in some way.
There are many ways to classify similar objects.



A hypothesis: A possible explanation to observations and questions asked. Not an educated guess!



A scientific law or scientific principle is a concise verbal or mathematical statement of a relation that is always applied under the same conditions.



A Theory: Explains scientific observations; "scientific theories must be falsifiable".



Theory Versus Law

- **Scientific Theory** - A logical explanation of observed events.
Example - Theory of evolution.
- **Scientific Law** - A theory that has been tested and widely accepted as true.
Example - Law of thermodynamics.

